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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,598	07/15/2003	Koji Kimura	03500.017433.	6860
5514	7590	12/02/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LE, UYEN CHAU N	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,598

Applicant(s)

KIMURA ET AL.

Examiner

Uyen-Chau N. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/16/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The Abstract of the Disclosure is objected to because the abstract should be in a single paragraph. Appropriate correction is required. See M.P.E.P. § 608.01(b).

Claim Objections

3. Claims 2-3, 5, 8-9, 14 and 19 are objected to because of the following informalities:

Re claim 2, line 3: Substitute "for being able to" with -- configured to --.

Re claim 3, line 3: Substitute "the operation" with -- an operation --.

Re claim 5, line 5: Substitute "the operation" with -- an operation --.

Re claim 8, lines 8-9: Substitute "the card type" with -- a card --.

Re claim 9, line 8: Substitute "the card type" with -- a card --.

Re claim 9, line 16: Substitute "the card type" with -- a card --.

Re claim 14, line 3: Substitute "the operation" with -- an operation --.

Re claim 18, line 8: Substitute "ejecting means" with -- the ejecting means --.

Re claim 18, line 12: Substitute "driving means" with -- the driving means --.

Re claim 19, line 13: Substitute "energizing means" with -- the energizing means --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US 5,578,811).

Re claims 1 and 4: Suzuki discloses a carrying motor 58 serves as an automatic mounting/dismounting means for automatically ejecting selectively the storage medium/card C from carriage 36, which serves as a storage medium/card adapter (col. 6, lines 40-45), and for automatically mounting the storage medium/card C at the storage medium adapter/carriage 36, in a state in which the storage medium adapter is mounted (col. 5, lines 25-40), and for locking the storage medium adapter/carriage 36 at the time of the automatic ejection or at the time of the automatic mounting (i.e., prevents the carriage 36 from moving. In this case, the carriage 36 is locked at home position at the time of automatic ejection and automatic mounting) (see figs. 5 & 9; col. 5, line 25 through col. 6, line 45).

Re claim 6: see claim 1. Suzuki further discloses an adapter/carriage sensor means 40 for sensing the presence of the storage medium adapter/carriage 36 (fig. 5; col. 6, lines 30+).

Re claim 7: a medium/card sensing means 52 for sensing the presence of mounting of the storage medium/card C with respect to the storage adapter/carriage 36, wherein the automatic mounting/dismounting means/carrying motor 58 automatically ejects selectively the storage

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medium/card C from the storage medium adapter/carriage 36 after the mounting of the storage medium with respect to the storage medium adapter is sensed by the medium/card sensing means 52 (i.e., the carrying motor 58 only performs ejecting process when the card C is mounted on the adapter/carriage 36, when the sensor 52 detects that the rear of the card C has past the sensor 52, which means the card C is no longer mounted on the adapter/carriage 36, the carriage motor 58 is stopped to end the ejecting process of the card C) (see fig. 1; col. 4, lines 28+ and col. 6, lines 42-45).

Re claim 8: a control means (i.e., CPU) for carrying out an electric power supply for the card C and for carrying out writing and reading of data on and from the card C (col. 6, lines 24-29).

Re claim 9: the control means/CPU makes the storage medium mount/dismounting mechanism/carry motor 58 to carry out automatic ejecting operation and automatic mounting operation upon insertion (i.e., when the CPU receives signal from the home position sensor 40, the CPU controls the carrying motor 58 to drive in the discharging direction to eject the card C from the carriage 36 (col. 6, lines 30-45); and when the CPU receives signal from the card detection sensor 51 upon detecting an insertion of the card C, the CPU controls the carrying motor 58 to rotate in the feed direction to mount the card C on the carriage 36 (col. 5, lines 25-40)).

6. Claims 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nabetani et al (US 5,889,649).

Re claim 10: Nabetani et al discloses a mounting means for mounting a removable storage medium adapter 2 in which a removable storage medium 3 is mounted; and ejecting

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means [8, 13] for selectively ejecting one or both of the storage medium 3 and the storage medium adapter 2 in a state in which the storage medium adapter is mounted at the mounting means (figs. 8-11; col. 7, line 24 through col. 8, line 37).

Re claim 16: the ejecting means 8 serves as a mounting function which guides the storage medium adapter 2 to the inserting direction and mounts the storage medium adapter 2 at the mounting means in accordance with an inserting operation of the storage medium adapter 2 into the mounting means (figs. 4-9; col. 6, line 60 through col. 7, line 57).

Re claim 17: the ejecting means 13 serves as a mounting function which guides the storage medium 3 to the inserting direction and mounts the storage medium 3 at the storage medium adapter 2 in accordance with an inserting operation of the storage medium 3 into the storage medium adapter 2 mounted at the mounting means (fig. 7; col. 7, lines 21-27).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Nabetani et al in view of Renner et al (US 5,679,945). The teachings of Nabetani et al have been discussed above.

Re claims 1 and 4: Nabetani et al discloses a mounting/dismounting means for selectively ejecting the storage medium/card 3 from a storage medium/card adapter 2, and for mounting the storage medium/card 3 at the storage medium adapter 2, in a state in which the storage medium adapter is mounted (figs. 10 and 11; col. 7, line 66 through col. 8, line 32), and for locking the storage medium adapter 2 at the time of the automatic ejection or at the time of the automatic mounting (col. 8, lines 26-32).

Nabetani et al fails to teach or fairly suggest that the system is an automatic system for automatically ejecting the card and automatically mounting the card at the card adapter.

Renner et al teaches a card is automatically ejected to the user (col. 13, line 14) from a card adapter if an adapter is used (col. 14, lines 24-30).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the automatic ejecting mechanism of Renner et al into the system as taught by Nabetani et al in order to provide Nabetani et al with an advanced system in which the card is automatically ejected upon completing all desired operations, thus providing a time consumption system. Furthermore, providing an automatic or mechanical means to replace a manual activity, which accomplished the same result (i.e., to eject a card) is not sufficient to distinguish over the prior art.

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Re claims 2 and 3: manual ejecting means [8, 9] configured to manually eject the storage medium adapter 2 (figs. 8-9; col. 35-65) and a lock member 188b locking the manual ejecting means, wherein, during an access to the storage medium, the manual ejecting means is locked by the lock member, and the storage medium adapter is in a state of being impossible to be ejected (figs. 23a-23b; col. 14, lines 53-65).

Re claim 5: projections [176a-b, 177a-b] serves as pressure means for holding by sandwiching and pressing the storage medium adapter 171, wherein the pressure means works with the operation in which the storage medium is ejected from the storage medium adapter, sandwiches and presses the storage medium adapter (figs. 21-22; col. 13, line 10 through col. 14, line 28).

10. Claims 13-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nabetani et al in view of Ikari et al (US 6,272,091). The teachings of Nabetani et al have been discussed above.

Re claims 13-15 and 18: Nabetani et al have been discussed above but fail to teach or fairly suggest energizing means for applying energizing force in a direction opposite to the ejecting direction with respect to the storage medium adapter when the storage medium is selectively ejected by the ejecting means from the storage medium adapter mounted at the mounting means.

Ikari et al teaches a spring 26 serves as energizing means for applying energizing force in a direction opposite to the ejecting direction with respect to the storage medium adapter 21 when the storage medium 20 is selectively ejected by the ejecting means from the storage medium adapter mounted at the mounting means (figs. 3-7; col. 3, line 60 through col. 5, line 5).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ikari et al into the system as taught by Nabetani et al in order to provide Nabetani et al with an alternative means for ejecting the storage medium from the storage medium adapter. Furthermore, such modification would have mere been a substitution of equivalents well within the ordinary skill in the art, and therefore an obvious expedient.

Allowable Subject Matter

11. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of records to Nabetani et al, Renner et al, Suzuki and all other cited references, taken alone or in combination, fails to teach or fairly suggest the specific structure or the method ejecting a storage medium from a storage medium adapter comprising, among other things, ejecting means switches an ejecting operation of the storage medium and an ejecting operation of the storage medium adapter in accordance with a driving force in the forward direction and a driving force in the backward direction generated by the driving means as set forth in the claimed combinations.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to Wu (US 6219256 B1); Okada et al (US 6374315 B1); Nabetani et al (US 6643125 B2); Shimada et al (US 6663398 B2) are cited as of interest and illustrate to a similar structure of a storage medium mounting/dismounting mechanism and information processing apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on Mon, Wed. and Fri. 5:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Uyen-Chau N. Le
November 26, 2004